

## **REMARKS**

Claims 1-37 are pending in this application. In this Response, Applicants have amended certain claims. In light of the Office Action, Applicants believe these amendments serve a useful clarification purpose, and are desirable for clarification purposes, independent of patentability. Accordingly, Applicants respectfully submit that the claim amendments do not limit the range of any permissible equivalents.

In particular, independent claims 1 and 18 have been rewritten to overcome §112 issues. Additionally, claims 1, 18, 28, and 36-37 have been amended to overcome §103 rejections. Furthermore, claim 14 has been cancelled to maintain consistency with the amendments to independent claim 1. As no new matter has been added, Applicants respectfully request entry of these amendments at this time.

### **THE REJECTIONS UNDER §112**

The Examiner rejected independent claims 1 and 18 under 35 U.S.C. §112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements. Applicants have amended the claims to recite the structural cooperative relationship of the elements. With respect to claim 1, the amendments clarify that the light receiver is positioned to receive light emitted by the fluorescent marker. In addition, claim 18 now recites that the first and second cameras are positioned to view at least one of the two objects and to acquire images of light emitted by the fluorescent markers.

Thus, in light of the amendments herein, Applicants respectfully submit that the §112 rejection has been overcome. As such, Applicants respectfully request reconsideration and withdrawal of the rejection.

### **THE REJECTIONS UNDER 35 U.S.C. §103**

Claims 1-12, 15-17, 28-33, and 36-37 were rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,293,911 to Imaizumi *et al.* (“Imaizumi”) as provided on pages 3-4 of the Office Action. In addition, the Examiner rejected claims 13-14, 18-27, 30, and 34-35 as being unpatentable over Imaizumi in view of U.S. Patent No. 5,575,719 to Gobush *et al.* (“Gobush”) for the reasons set forth on pages 4-5 of the Office Action. As explained in detail

below, neither Imaizumi nor Gobush, either alone or in combination, disclose or suggest the present invention.

**Imaizumi Is Not Analogous**

Imaizumi generally discloses a fluorescent endoscope system. *See Abstract.* The endoscope system includes a light source capable of directing light at an object, and a light receiver comprising a filter. *See Col. 5, lines 46-53 and 58-61; Col. 7, lines 58-60; and Fig. 1.* In the Office Action, the Examiner asserts that Imaizumi discloses a monitor system for measuring the kinematics of an object. It is well known that in order to measure the kinematics of an object, the object being observed would have to be moving at some point in time.

Imaizumi, however, teaches attaching an antibody labeled by a fluorescent substance to living tissue. *See Col. 7, lines 29-41.* When the light source directs light to the living tissue, light emitted from the fluorescent substance may be captured and imaged. *See Col. 7, lines 39-62.* Clearly, living tissue does not move in any detectable manner. Thus, the disclosure of Imaizumi is clearly not within the art of the present invention and is not concerned with the problem that the present invention is related to, *i.e.*, measuring the kinematic characteristics of golf equipment.

**Imaizumi Does Not Disclose or Suggest the Present Invention**

Even if, *arguendo*, Imaizumi is analogous to the present invention, Applicants submit that the claimed subject matter is not taught or suggested. As mentioned above, Imaizumi discloses a light source and light receiver that monitor stationary materials, *e.g.*, living tissue. Imaizumi does not mention the ability to measure the kinematics of a moving object. In fact, Imaizumi teaches away from the ability to measure the kinematics of a moving object because it discloses inserting an endoscope containing the light source and light receiver into a body cavity for observation or diagnosis of the inside of the body cavity. *See Col. 5, lines 32-44.* Therefore, Imaizumi would be incapable of observing or measuring the kinematics of moving objects when used in its intended manner.

As shown above, the Applicants have amended independent claims 1, 18, 28, and 36-37 to clarify that the present invention is directed to one or more of the following: (i) a light source capable of directing light onto a golf ball; (ii) measuring the kinematics of one or more objects; and/or (iii) a golf club having at least one fluorescent marker. Viewed in light of the claim

amendments, Imaizumi is deficient because a) it does not disclose golf objects, *e.g.*, a golf club or a golf ball, and b) it does not disclose determining the kinematics of a moving object. As such, Applicants respectfully submit that the Examiner's rejections have been traversed. Reconsideration and allowance of the pending claims is respectfully requested.

**Gobush Does Not Remedy the Deficiencies of Imaizumi**

The Examiner also rejected claims 13-14, 18-27, 30, and 34-35 as being unpatentable over Imaizumi in view of Gobush. Gobush is directed to a monitoring system that determines a golf object's movement and orientation, and the conditions at impact with the object. *See Abstract.* Gobush does not remedy the deficiencies of Imaizumi, *i.e.*, it does not teach or suggest the use of fluorescent markers on golf objects or the combination of filters with a light source and/or light receiver.

In addition, there is no suggestion to combine Imaizumi and Gobush. Imaizumi pertains to detecting malignant cells, which are stationary within a human body. Gobush is related to monitoring moving golf equipment. One skilled in the art of monitoring golf equipment would not have been motivated to combine the teachings of Gobush with the disclosure of Imaizumi, as the Examiner suggests. Moreover, by requiring insertion into a human body, the Imaizumi invention teaches away from combination with a system for monitoring high speed moving objects such as golf equipment. Therefore, it would have been impossible to combine the teachings of Imaizumi and Gobush to result in the invention presently recited in the claims.

Thus, neither Imaizumi nor Gobush, either alone or in combination, teach or suggest the present invention. In light of the amendments to the independent claims, Applicants submit that the Examiner's rejections are traversed. As such, Applicants believe that independent claims 1, 18, 28, and 36-37 are in condition for allowance. Additionally, Applicants submit that the dependent claims are in condition for allowance, at least by virtue of their dependency from independent claims 1, 18, 28, and 36-37. Reconsideration and allowance of the pending claims is respectfully requested.

## CONCLUSION

All claims are believed to be in condition for allowance. If the Examiner believes that the present amendments still do not resolve all of the issues regarding patentability of the pending claims, Applicants invite the Examiner to contact the undersigned attorney to discuss any remaining issues.

A Petition for Extension of Time is submitted herewith to extend the time for response one month to and including June 8, 2005. A Fee Sheet Transmittal is submitted herewith to pay for the one month extension of time. No other fees are believed to be due at this time. Should any fee be required, however, please charge such fee to Swidler Berlin LLP Deposit Account No. 195127, Order No. 20002.0162.

Respectfully submitted,  
SWIDLER BERLIN LLP

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